

COST *and* MANAGEMENT

VOL. XXVI

JUNE

No. 6

BUDGETING: ITS USEFULNESS TO SMALL BUSINESS

By A. F. Gosling 198

Mr. Gosling obtained his early training in England where he received wide and varied experience in both industry and professional work. Before coming to Canada in 1947, he served five years with the R.A.F. After working for a time in Toronto he became associated with Hudson McMackin & Co. and is presently working out of the Moncton office.

INCREMENT COSTING—SPECIAL COSTS FOR SPECIAL NEEDS

By W. J. Elliott 206

Mr. Elliott became Manager of the Cost Department of the Ford Motor Co. of Canada, Ltd., in 1948. He was educated in London, Ontario, and worked for a number of years as a cost and production man in the U.S.A. before coming back to Canada in 1929.

ACCOUNTANTS REPORTS FOR MANAGEMENT

By Avarð Marven 214

A resident of Moncton, Mr. Marven is a partner in Lee & Martin, Chartered Accountants. Before entering the business world, he graduated from Dalhousie University with a Bachelor of Commerce degree.

REGULAR DEPARTMENTS

SOCIETY NOTES 188

NEW MEMBERS 190

CHAPTER NOTES 192

C. & M. ROUND-UP 194

CURRENT ARTICLES OF INTEREST 196

STUDENT SECTION 218

Published Monthly by the
SOCIETY OF INDUSTRIAL AND COST ACCOUNTANTS OF CANADA
Incorporated 1920

Editorial and Business Offices: 66 King St. E., Hamilton, Ontario.
J. N. Allan, R.I.A., Secretary-Manager and Editor.

Subscription price to non-members, \$5.00 per year. Single copies, 50 cents. Members desiring five copies or more of a single issue, may obtain them at 25 cents. Opinions expressed by articles and comment are not necessarily endorsed by the Society of Industrial and Cost Accountants.

Authorized as second class mail, Post Office Department, Ottawa.

SOCIETY NOTES

CHAPTER ORGANIZED IN SYDNEY, NOVA SCOTIA

The Nova Scotia Society has again come to the forefront with the announcement that a Chapter has been organized in Sydney.

Charter members of the Society, resident in Sydney have been working on the organization of the Chapter throughout the past year under the guiding influence of the Provincial Council.

In February, a meeting was held with Provincial President Charlie MacFadden, and Spencer S. MacIntosh, Chairman of the Educational Committee in attendance. Under their leadership the organization of the Chapter was completed with approximately 40 members. The following are the officers of the new chapter.

Chairman — D. F. Rutherford, R.I.A., Director of Income Tax.

Vice-Chairman — Stewart Urquhart, Dominion Steel & Coal

Secretary — R. M. Nickerson, C.A., R.I.A.

Chairman Programme Committee — Charles Campbell, Dominion Steel & Coal

The Sydney Chapter is the second for the Province of Nova Scotia and the 30th for the Canadian Society. To the officers and members of council, we extend our heartiest congratulations. To the officers and members of the Sydney Chapter, we bid welcome on behalf of our 3,200 members from coast to coast. We hope they will derive much of pleasure and value from their local, provincial and national associations.

ONTARIO SOCIETY HOLDS SUCCESSFUL THREE-DAY CONFERENCE

With a record registration of 243, the Ontario Society concluded its most successful Annual Conference to date.

Proceedings began Thursday afternoon, May 29th, with the Chapter Officers' Conference under the chairmanship of Geo. H. Greenhough, R.I.A. Many aspects of Chapter activities were discussed and a number of valuable suggestions were made

SOCIETY NOTES

which are certain to be reflected in the Chapter programmes next season.

Friday was devoted to three technical sessions dealing with the theme "Challenging Opportunities to Industrial Accountants".

Mr. C. R. Jolly, Internal Auditor, Lever Bros., addressed the first morning session on the subject, "Shrinking Margins of Safety in Business — A Challenge to Industrial Accountants".

At the second session a thought-provoking paper was presented by Mr. Willis T. Windle, Comptroller, Carborundum Co., Niagara Falls, N.Y., on the subject, "Maintaining a Proper Balance in Business Management — The Role of the Industrial Accountant". The afternoon session heard Prof. Kenneth F. Byrd speak on the subject, "Measurement of Profits for Executive Decisions".

All sessions were conducted under the very capable chairmanship of Norman R. Barfoot, R.I.A. The discussion period following each address exceeded the time allowed and had to be cut short.

The Annual Dinner was a truly outstanding event. The Honourable Dr. Dunlop, Minister of Education for the Province of Ontario, gave a very stirring address on Education Today. He opened his remarks by paying high tribute to the Society for the excellence of its educational programme and the high standards which it had achieved. During the dinner, Mr. Max Coutts, on behalf of the members, paid a fitting tribute to retiring President Jack S. Benson and presented him with a silver tray and cocktail glasses.

The entertainment was presented by the Earl Terry Singers and provided a very fitting finale to the Annual Dinner programme.

The entire conference was unfolded with almost split-minute precision and was the result of very careful planning and preparation by the Conference Committee under the chairmanship of Alex Moorhouse. Members of the Committee were:

Mr. Alex S. Magee, Dominion Manufacturers Ltd.

Mr. C. E. (Ted) Costain, R.I.A., Costain, Stiles, Langford, Ltd.

Mr. Norman H. Duncan, R.I.A., John Labatt Limited

Mr. Norman R. Barfoot, R.I.A., Fibreglas Canada Ltd.

Mr. Millard P. McBain, R.I.A., Kellogg Co. of Canada Ltd.

Mr. Reg Diwell, R.I.A., Firestone Textiles, Ltd.

COST AND MANAGEMENT

New Members

CALGARY CHAPTER

James Orr, John, Tynan & Co. Ltd.

NON-RESIDENT BRITISH COLUMBIA

James H. Urch, Calumet, Elsa P.O., Yukon Territory

HAMILTON CHAPTER

Miss M. Jeannine Nelles, Dominion Foundries & Steel Ltd.

Andrew Kidd, County of Wentworth Roads Dept.

Arnold Grabis, Vi-tone Products Ltd.

KENT COUNTY CHAPTER

Mervil G. Wood, Canada and Dominion Sugar Co. Ltd., Chatham

KINGSTON CHAPTER

J. Graham Torney, Aluminum Company of Canada

LONDON CHAPTER

William A. Kirk, Minnesota Mining & Mfg. of Canada Ltd.

Walter E. Gellatly, Minnesota Mining & Mfg. of Canada Ltd.

OTTAWA CHAPTER

Mrs. Ann Macklin, Malnor Traders Ltd.

Alfred E. A. Merkel, Office of the Comptroller of the Treasury

Daniel L. Storey, McDonald, Currie & Co.

Miss Phyllis E. Beaton, Malnor Traders Ltd.

N. Wainwright Cleary, McDonald, Currie & Co.

Bert F. Shepherd, Remington Rand Ltd.

PETERBOROUGH CHAPTER

Robert R. Freeman, Outboard Marine & Manufacturing Co. Ltd.

TORONTO CHAPTER

Raie T. Hill, Massey-Harris Co. Ltd.

Alan G. McKenna, The British Oxygen Canada Limited

John E. Boyle, 322 Albert St., Oshawa, Ont.

VANCOUVER CHAPTER

Alan W. Hyde, 2465 York Street, Vancouver 9, B.C.

Gordon Munn, 3772 W. 11th Ave., Vancouver 8, B.C.

Charles J. Potter, R. A. Nelson Contracting Co.

R. J. Humphreys, I.X.L. Laundry

David C. Smyth, Central Scientific Co.

K. G. Nichols, Commonwealth Construction Co. Ltd.

Robert P. Ledebor, 2037 West 16th Ave., Vancouver 8, B.C.

VICTORIA CHAPTER

Aubrey Jenkins, Ismay, Boiston, Dunn & Co.

WINDSOR CHAPTER

Terence Bevan, R. P. Scherer Ltd.

WINNIPEG CHAPTER

David C. Girvin, Winnipeg Supply & Fuel Co. Ltd.

Leslie H. Williamson, Peter Leitch Construction Co. Ltd.

COST AND MANAGEMENT

ORDER MASTER

THE TITANIUM ALLOY
EXECUTIVE OFFICES
110 Broadway, New York City

THE TITANIUM ALLOY MANUFACTURING COMPANY
EXECUTIVE OFFICES 111 BROADWAY, NEW YORK CITY

PACKING LIST

THE TITANIUM ALLOY

THE TITANIUM ALLOY MANUFACTURING COMPANY

SHIPPING COPY

THE TITANIUM ALLOY

THE TITANIUM ALLOY MANUFACTURING COMPANY

BILL OF LADING

THE TITANIUM ALLOY

THE TITANIUM ALLOY MANUFACTURING COMPANY

ACKNOWLEDGMENT

THE TITANIUM ALLOY

THE TITANIUM ALLOY MANUFACTURING COMPANY

ACCOUNTS RECEIVABLE

THE TITANIUM ALLOY

THE TITANIUM ALLOY MANUFACTURING COMPANY

DUPLICATE INVOICE

THE TITANIUM ALLOY

THE TITANIUM ALLOY MANUFACTURING COMPANY

SALESMAN'S COPY

THE TITANIUM ALLOY

THE TITANIUM ALLOY MANUFACTURING COMPANY

STATISTICAL COPY

THE TITANIUM ALLOY

THE TITANIUM ALLOY MANUFACTURING COMPANY

"DITTO SOLVES

BACK-ORDER PROBLEMS—GETS OUT ORDERS 4 TO 5 DAYS SOONER—SAVES THOUSANDS YEARLY."

Titanium Alloy Mfg. Co., Niagara Falls, New York

Order—shipping—invoice routines are simplified, shortened, speeded with Dittos's One-Writing Method. A single writing or typing on a *paper original* provides all necessary instructions and records for filling, shipping and billing the order no matter how many shipments and back-orders are made! The Ditto method requires no mats—no stencils—no special skills. No other method handles the job so completely, so effectively. For a graphic picture of how this is done, write for our new folder, "An Order Billing System That Does Everything," and an actual set of forms showing what Ditto does. There's no cost, no obligation.

DITTO of Canada, Ltd., 310 Spadina Ave., Toronto, Ont.

DITTO

ONE-WRITING BUSINESS SYSTEMS

Copies

RUN YOUR BUSINESS

1 Ditto	1 Ditto	1 Ditto	1 Ditto
2 Ditto	2 Ditto	2 Ditto	2 Ditto
3 Ditto	3 Ditto	3 Ditto	3 Ditto
4 Ditto	4 Ditto	4 Ditto	4 Ditto
5 Ditto	5 Ditto	5 Ditto	5 Ditto
6 Ditto	6 Ditto	6 Ditto	6 Ditto
7 Ditto	7 Ditto	7 Ditto	7 Ditto
8 Ditto	8 Ditto	8 Ditto	8 Ditto
9 Ditto	9 Ditto	9 Ditto	9 Ditto
10 Ditto	10 Ditto	10 Ditto	10 Ditto

Chapter Notes

OTTAWA CHAPTER

On Thursday afternoon many vacant desks could be found in offices in and around Ottawa, as members of the Ottawa Chapter journeyed to Arnprior, for a plant tour of Kenwood Mills Limited. On this occasion, the members were accompanied by their wives who followed with interest the various processes in the manufacture of woollen blankets as well as the felts used on paper-making machines.

Following the plant visit, the group moved on to the Arnprior Golf Club, where the annual dinner meeting was held. C. F. Hembery, Chairman of the Chapter, presided. W. W. Trowsdale, Vice-President of Kenwood Mills Limited, extended a welcome to the group, expressing the pleasure of the Company upon being able to act as host to such a Society.

G. I. McKenzie, B.Sc., R.I.A., of Toronto, President of the Society of Industrial and Cost Accountants of Canada, spoke briefly on the part which the educational programme of the Society played in the development of potential executives now required through Canada's tremendous industrial expansion. He also pointed out the increasing recognition being given to the Society's degree of Registered Industrial Accountant.

J. N. Allan, R.I.A., of Hamilton, Secretary-Manager of the National Organization, informed the meeting that the Chapter had won the Fernie Trophy, which is awarded annually to the Chapter obtaining the greatest membership increase in the Dominion. The presentation will be made at the National Convention, in Vancouver, in June. He commended the local Chapter for this achievement during a year which showed tremendous strides in the Society's growth. He commented briefly on the education programme which is carried on at a high uniform level in each of Canada's ten provinces in co-operation with 21 universities.

The Chairman, in presenting the President's report, reviewed the Chapter's activities during the year, the very successful meetings at which leaders in the field of industrial accounting and allied professions addressed the Chapter. Members were urged to attend the Ontario Convention in London, on May 29th and 30th.

Following the education membership and finance reports, the directors for 1952-53 were announced.

The Directors are: Past Chairman C. F. Hembery, J. B. Daugherty, R.I.A., Buckingham, Que.; A. B. Graham, B.Comm.; E. G. Hamlyn, Miss L. G. Harvey, Prof. W. J. McDougall, B.A., C.A., C. A. Miller, R.I.A.; A. A. Sterns, Ph.D., M.A., B.Comm., C. B. Watt, F.C.I.S., R.I.A., and C. K. Wolff.

PAYNE, PATTON & PUGSLEY

CHARTERED ACCOUNTANTS

Gordon S. J. Payne, C.A.

Donald R. Patton, C.A.

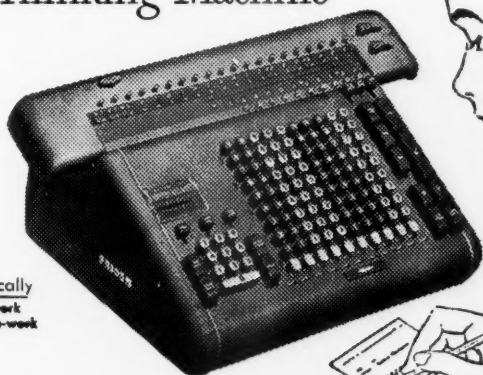
Philip T. R. Pugsley, C.A.

507 University Tower, Montreal 2, UNIVERSITY 6-6961

Payroll calculations in a twinkling by the Friden Calculator- The Thinking Machine

Automatically

It takes work
out of figure-work



Watch the Friden Automatic Calculator handle a payroll and you'll realize its unmatched flexibility and capacity for all kinds of "figure thinking". Every computation—straight time, overtime, take-home pay, payroll recap—performed automatically and with uncanny speed

• Exclusive features enable the Friden to handle more steps in figure-work without operator decisions than any other calculating machine ever developed.

Once the operator sets a problem on the keyboard—and touches the proper keys—no additional human motions are required. The Friden automatically "thinks out" accurate answers.



Friden

THE THINKING MACHINE OF AMERICAN BUSINESS

You and the Friden Man will discover important applications of Friden "figure thinking" in terms of your own business.

Figure on a Friden NOW—phone or write the Friden Man near you. Friden sales, instruction and service available throughout the U.S. and the world. FRIDEN CALCULATING MACHINE CO., INC., San Leandro, Calif.

© Friden Calculating Machine Co., Inc.

FRIDEN CALCULATING MACHINE AGENCY

Canadian Distributors: JOSEPH McDOWELL & CO.

992 Bay Street, Toronto 5, Ontario

Sales and Service in all principal cities.

COST AND MANAGEMENT

◆ C & M ROUND-UP ◆

By N. R. BARFOOT, R.I.A.

LIFE INSURANCE DOLLARS

Interesting facts on Life Insurance activities in Canada are:

Total Life Insurance in Force	\$17,235 million
Assets	4,800 million
Annual Receipts from Policy Holders	400 million

Schedule of investments percentage wise:

Bonds	Pre-war	1945	1951
Federal Government	11%	33%	22%
Other Government	24.8	28.5	23.3
Public Utility and Industrial	15	14.3	23.6
Mortgages	13.4	7.7	15.9
Policy Loans	11.4	5	4.4
Stocks and Other	23.5	11.3	10.7

Life Insurance is big business in Canada and serves two broad purposes, to provide protection for the Canadian citizen and to help him financially through housing loans, industrial loans and policy loans.

The Insurance companies buy large blocks of Federal and other gold label bonds. They do very careful investing and do not play the market. Therefore, the financial health of Canadian Insurance Companies is always good.

BANK LOANS

Loans by the chartered banks during February were down 39 millions from the previous month. This demonstrates:

Further progress in the anti-inflation battle.

Greater gain than actual figures show, since February loans are usually high due to incurred inventories by manufacturers and farmers, preparing for spring trade.

Defence loans have not increased as rapidly as expected.

CONSTRUCTION NEWS

Total Money to be Spent, 1952	3.8 billions
New Construction	2.9 billions
Compared to 1951, up 7%	
Compared to 1950, up 22%	
New Housing	758 millions
Down from Last Year	840 millions
New Factories up from 1951, 13%	
New Factories up from 1950, 99%	
Government Building, 1952	1 billion
Government Building, 1950	340 millions

C. & M. ROUND-UP

AIRCRAFT STATISTICS, 1952

The goal — 200 planes per month by year end.

Prime employer (Canadair) — 16,000 employees by year end.

Number of sub-contractors — 120.

Total value of orders in hand — 250 millions.

TRADE NORMALCY BACK?

There are some strong indicators that the "good old days" are back, as evidenced by:

Prices were definitely lower; the C.O.L. index had dropped two months in a row, would probably dip further.

Commodity prices — the retail price governor — has been dropping steadily, averaging anywhere from 5% to 70% lower.

Many businesses that had been operating full blast the year 'round, were back to the old seasonal basis.

Business generally seemed to be beginning to follow the traditional seasonal ups and downs.

While employment was up and going higher, the market favors the buyer, instead of the seller, in many lines.

Cost-of-living escalator clauses in wage contracts are going out for the first time since they became popular.

WESTERN CANADA ECONOMICS

A recent reassessment of the latest facts of Western Canada's economic picture shows:

Total area of three western provinces, 753,497 square miles.

Total area favourable to oil development, 400,000 square miles.

Population — 2.5 millions.

Agriculture

Cash Income, 1951 — 1,362 millions.

Cash Income, 1950 — 1,000 millions.

Oil

Production, 1951 — 47.1 million barrels.

Value, 1951 — 118 millions.

Production, 1950 — 28.2 million barrels.

Value, 1950 — 81.8 millions.

Canadian sources supplied 26.75% of Canadian consumption in 1951.

Industrial

Gross manufacturing production — 1951 — 1,268 millions.

Gross manufacturing production — 1950 — 1,100 millions.

Expected capital expansion for secondary industry, 1952 — 200 millions.

Mineral

Gross Production — 1951 — 135 millions.

Gross Production — 1950 — 115 millions.

Coal reserves representing 15% of world's total — 46.5 billion tons.

Basic problems are lack of population and/or long haul to markets.

COST AND MANAGEMENT

CURRENT ARTICLES OF INTEREST TO INDUSTRIAL ACCOUNTANTS

BUDGETS AND BUDGETING

CASE STUDY OF BUDGET DEVELOPMENT FOR A MANUFACTURER, by Theodore R. Pleim, C.P.A., The N.Y. Certified Public Accountant — April 1952.

THE IMPACT OF BUDGETS ON PEOPLE — Controllershship Foundation, Inc.

DEPRECIATION

REPLACEMENT COST ACCOUNTING — The Accountants Journal — April 1952.

FINANCIAL STATEMENTS

A SIMPLIFIED WORKING SHEET FOR SOLVING FUNDS STATEMENT PROBLEMS, by Robert H. Gregory — The Canadian Chartered Accountant — May 1952.

HOSPITAL ACCOUNTING

AMELIORATION OF HOSPITAL ADMINISTRATIVE BURDEN VIA A PAYROLL CODE CONTROL, by Julian S. H. Weiner, C.P.A., The N.Y. Certified Public Accountant — May 1952.

INCENTIVES

STOCK OPTIONS AND DEFERRED COMPENSATION PLANS, by Philip Bardes, C.P.A. — The N.Y. Certified Public Accountant — April 1952.

MUNICIPAL

IMPROVED MUNICIPAL ACCOUNTING CAN CUT TAXES, by Gunnar Alenius, C.P.A. — The Journal of Accountancy — May 1952.

NEWSPAPERS

SOME ACCOUNTING PROBLEMS OF SMALLER NEWSPAPERS AND SIMILAR PUBLICATIONS, by Herbert H. Schueller, C.P.A. — The N.Y. Certified Public Accountant — May 1952.

PROFIT ANALYSIS

NET SALES VS. OPERATING PROFIT ON PER EMPLOYEE BASIS, by Ray H. Bartlett — The Controller — May 1952.

PROFIT SHARING

PROFIT-SHARING PLANS IN INDUSTRY, by Robert L. Rowe — Reprinted from Harvard Business Review.

PUBLICATIONS

ACCOUNTING PROCEDURES IN THE BOOK PUBLISHING INDUSTRY, by Charles Margolin, C.P.A. — The N.Y. Certified Public Accountant — May 1952.

REPORTS

HOW THE C. & O. OPERATES ITS FINANCIAL INSTRUMENT PANEL, by John E. Kusik — The Controller — May 1952.

ADDRESS OF PUBLICATIONS

The New York Certified Public Accountant, 677 Fifth Ave., New York 22, N.Y.
The Accountants Journal, 22 Bedford Square, London, W.C. 1.
The Canadian Chartered Accountant, 10 Adelaide Street E., Toronto, Ont.
The Journal of Accountancy, 270 Madison Avenue, New York 16, N.Y.
The Controller, 1 East 42nd Street, New York 17, N.Y.
Harvard Business Review, Gallatin House, Soldiers Field, Boston 63, Mass.

Everything to accelerate answers - and reduce costs!

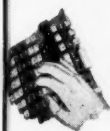
Burroughs Sensimatic

Accounting Machine



Mechanical Speed!

Sensimatic speed is reflex-action speed. One impulse from the operator to the mechanical brain sense plate—and the Burroughs Sensimatic starts and completes an entire cycle of operations automatically.



Operating Speed!

Sensimatic design permits the operator to work as fast as she chooses. Each key and motor bar has a uniform, scientifically correct pressure. Every control is within easy sight, easy reach.

Form-Handling Speed!



Sensimatic carriages open and close automatically—at the right times. Form insertion and alignment is a single swift motion. Transparent form guides permit the operator to see all needed figures before, during and after posting.



...and job to job change in seconds!



The operator simply twists the job-selector knob—the Sensimatic is ready for the work at hand! Each sense plate controls four jobs in any combination . . . and plates are instantly interchangeable for unlimited versatility.

Series 300

Series 200

Series 100



Now there are three!

Sensimatic 300 with 11 totals
Sensimatic 200 with 5 totals
Sensimatic 100 with 2 totals

When a Burroughs Sensimatic comes into your business, your accounting work steps up to the swift tempo of today's production pace. You get the facts that guide your operations on time all the time. You get more accounting done by fewer people . . . with fewer machines, less overtime, less expense. And you get all this at a surprisingly low cost! Find out about the Burroughs Sensimatic for your office . . . talk Sensimatic with your Burroughs man today. Burroughs Adding Machine of Canada, Limited, Windsor, Ontario.

Budgeting: It's Usefulness to the Small Business

A. F. GOSLING, C.A.
MONCTON, N.B.

Let us first turn our thoughts to an understanding of what constitutes a "Small Business". I suggest this because someone may think that their particular business is not sufficiently large enough to warrant the operation of a budget plan, and consequently, may perhaps miss the opportunity of thinking about some phase of budgeting that would be of particular interest to them in their work. How small is a "Small Business" and how large is a "Large Business?" The range may be between a single employer working on his own and to the largest companies with multiple branches. There is hardly a business that could not operate a budget to some advantage to the owner. Most housewives operate on a budget for the business of looking after the family, and in these times of increasing prices, it is certainly a very wise precaution to "cut your coat according to your cloth." This proverb may very well be applied to your business, regardless of the size! Having conceded the point in regards to the size of the business, you may well ask: "Why should I operate a budget — my business is showing a profit?" There are several sound reasons why your business should operate under a Budget and I will go briefly over a few of them for you.

History

The word "budget" is of Gallic origin and comes from the French word "bougette", meaning a wallet or leather bag or sack. It was commonly used to signify a portfolio or brief case and took on its present meaning in England about 1870. The Chancellor of the Exchequer, in reporting to the House of Commons what he regarded as the necessary taxes for the ensuing year, submitted a statement of the actual income and expenditures of the preceding year in comparison with the appropriations for that year. When submitting these statements the Chancellor was said "to open his bougette", and it is from this that the present word "budget" derives its meaning. The Chancellor's recommendations for the ensuing year were necessarily based upon a forecast and a plan for taxation and

BUDGETING: ITS USEFULNESS TO THE SMALL BUSINESS

administration but the word "budget" as used applied more to the *form* in which his recommendations were made and the *intention* that actual expenditures should not exceed the appropriations made, than to the forecast upon which they were based. So it may be said that a budget is a plan or forecast of business activity, related to a specified future period and expressed in terms of money.

The most famous and best known budgets in existence are those of our senior governments. It might be mentioned at this point that it took the government of the United States over twelve years to get going on a budget system. It was first recommended in 1912 after a special commission appointed to investigate the advantages or disadvantages of such a system made its report. It was not introduced, however, until the year 1923, when it became law as the result of growing public demand.

Aid to Management

The ordinary financial statements are historical documents. Nothing can be done to improve or alter the results of the past periods. These statements are the result of "just trading", rather than planned trading with constant checks upon current progress. Management is vitally interested in knowing the current progress of their business rather than waiting until the compilation of the financial statements when it is too late to take any steps about the results. F. V. Gardner refers to this situation in his book — "Variable Budget Control":—

"Yes, they tell you *how* we came out, but as managers, we want to know how we are *going* to come out and what can be done to *improve* the coming out."

By comparing actual results with Budget figures at frequent intervals discrepancies are shown up and steps may be taken *at once* to deal with the situation rather than wait until the year-end for explanations of adverse results.

The budget is therefore an aid to Management.

Aid to Obtaining Loans

It may not have occurred to us that a budget has any bearing on an application for a bank loan or in obtaining long-term loans, but the following extract from the National Industrial Conference Board Report shows very clearly that it has a very definite bearing:—

COST AND MANAGEMENT

"Although manufacturers when seeking loans from banks may not be requested to submit budgets, nevertheless in your opinion is the manufacturer who used budgetary control in his company a better credit risk than one who does not?" "The replies, summarized, stated that, all else being equal, the manufacturer who used budgetary control is a better risk than one who does not".

"The second question submitted to the banks was also submitted to the investment firms. Their replies were of the same tenor as those of the banks; they agreed that, other factors being equal, the manufacturer using budgetary control was a better credit risk than one who did not."

At the present time, credit is being fairly rigidly restricted by the banks. In certain cases it is possible to obtain loans and any information that will help the banks to decide in your favour will be most acceptable. A budget is such an aid. The bank is more likely to grant a loan to a business with a definite policy (or planned trading) than to the business just trading from day to day, as it were, without any particular plan of action.

Stimulation of Effort

As so often is the case in a number of businesses there is very little opportunity to secure promotion on a basis of exact results achieved. All too often promotion comes because of personal likes and dislikes of one's superiors. Whilst there is some merit in this method, there should be available means whereby the aggressive may progress on merit alone. The installation of a budget tends to eliminate all that, and allows the employee to express his ability to the fullest, which will be reflected in the comparison of financial operations. Give a man something to work for and you will bring out the best in him.

You can visualize the multiple effect this would have on a business with a budget.

Again, a budget promotes co-operation in acceptance of policies laid down by management and execution of plans.

A Buffer In Times of Depression

The budget is a kind of buffer in time of depression and enables the management to meet the waves of increased competition with calmness and fortitude.

BUDGETING: ITS USEFULNESS TO THE SMALL BUSINESS

A budget is looked upon amongst other things as a means of operating more efficiently. In other words, it is an encouragement to the employees to obtain objectives, effect savings and operate more efficiently.

I referred earlier to the person who was showing an operating profit and perhaps doubted the wisdom of having a budget plan. What is going to happen to a good many of these businesses when the "going gets tough" and consumer demand decreases? They will probably have very little means of assessing their relative efficiency and as a consequence will find themselves making serious losses.

The business that has definite objectives in its operations can weather a storm much more effectively than the business that does not know just what it is doing. This latter business can be likened to a ship without a rudder that when the storm strikes, drifts helplessly onto the rocks of insolvency.

It has been stated that a test of efficient management is: "(1) whether or not it can end a turnover process with more money than at the start; (2) how much money is needed to mobilize the other factors; and (3) how often a turnover can be realized in a year's time." — F. V. Gardner — "Variable Budget Control".

The turnover process can be said to be the mobilization of the M's of business:—

MANAGEMENT

Mobilizes

MACHINERY, MATERIAL, MEN, METHODS, MONEY,

to produce

PRODUCTS or SERVICES

Converted through

SALES

to

MONEY

Other Reasons

Other purposes of a budget may be summarized as follows:—

- (1) To establish a definite objective with regard to operating performance.
- (2) To formulate executive policies as to future operations.
- (3) To determine limits to which expenditures are to be confined.

COST AND MANAGEMENT

- (4) To determine what funds will be required, *when* they will be needed, and from *what sources* they will be derived.

Preparation of a Budget

A few words on the method of preparing a budget is, I think, appropriate at this point.

As a concomitant of a budget, it is of the utmost importance that there should be a sound accounting system. Breakdowns as to venues and expenditures should be sufficiently detailed according to functions and departments, to ensure an accurate as possible budget.

Broadly speaking, the following is how a budget would be built up:

The first step to be taken when making up a budget is to forecast or estimate the sales for the period under review. This should be done as to products, territories, quantities, values, etc.

This forecast would be passed on to the production department who will then prepare a budget of its selling or operating cost based on the forecast sales, including the advertising department who would co-ordinate with the sales department.

The administrative department will also prepare a budget of their expenses. Whilst some of this department's expenses will be fixed — that is, will not vary as to sales, other expenses may be expected to move in direct proportion to the increase or decrease on sales; e.g.; invoicing department, particularly if new lines involving a large number of small accounts are involved. Careful review of the sales forecast must be made by this department and any variables must be taken into account in preparing its budget.

One other very important budget is the Cash Budget which will show the cash requirements of the proposed budget, the source the funds will be obtained from, when they will be available, and the cash position at the end of the period. This budget is usually prepared either with monthly or quarterly columns to take into account seasonal or other fluctuations that would require adjustment.

The departmental budgets are then summarized into a master budget to give you a plan of campaign for the coming period. Included in this master budget would be anticipated costs of any improvements of a capital nature.

The master budget is further subject to check by the management and after review a final budget is accepted for

BUDGETING: ITS USEFULNESS TO THE SMALL BUSINESS

operation. This final budget is passed to the departments concerned who will be responsible for keeping within the forecast results.

Once in operation, periodic reports of actual results compared with the budget estimates are prepared, and copies given to each department.

Simplicity at First Attempt

If the work entailed in the preparation of a budget tends to appall you, try forecasting the results based on last year's figures in simple terms without too much detail. You will amaze yourself how near you can come to actual results. Then build and expand your budget from there!

Accomplishments of Budget System

A sound budget system will prove of inestimable value in your business and some of the things a budget will do are stated in the following extract — taken from a publication of the Chamber of Commerce of the United States:—

1. *Forecast the Volume of Sales*

"A good budget system shows the executive what may be expected in the line of business over the next few months, thereby assisting him and his sales department in directing sales effort. Further, the sales quota established by the budget system sets a goal to be reached by the sales department.

2. *Establishes a Production Quota*

A good budget system provides for the setting up of a production quota based on the estimated sales as the result of which the works' manager may lay out production well in advance, specifying —

- (1) The amount and kinds of material that will be needed.
- (2) The size and kind of working forces that must be provided.
- (3) The amounts of overhead that will be expended.
- (4) The requirements in machines and equipment.

3. *Assists the Purchasing Agent*

A good budget system is of great value to the purchasing agent, enabling him to negotiate purchase contracts and orders to the best advantage and with the most accurate knowledge of requirements.

4. *Enables Establishment of a Consistent Labor Policy*

A good budget system makes possible a consistent policy

COST AND MANAGEMENT

with respect to the employment and education of working forces and when necessary by an anticipated reduction in business, the scaling down of the forces intelligently and with due regard to the rights of the workers.

5. *Points Out Financial Requirements*

A good budget system assists the executive in gauging the necessary cash requirements of the business, indicates the probable condition of accounts receivable and accounts payable; and in general, acts as a compass in steering the finances of the business in the safest course."

Advantages of a Budget

The advantages of a budget have been aptly summarized by J. O. McKinney in an article published in the National Association of Cost Accountants Bulletin, as follows:—

1. Co-ordination of sales and production.
 - (a) By estimating sales possibilities and planning production to produce the goods necessary to meet these possibilities.
 - (b) By limiting production to the amount necessary to meet probable sales demands as shown by the sales estimate and thus preventing an excess inventory of finished product.
2. The formulation of a profitable sales and production program.
 - (a) By determining the lines of goods most desirable for a well-rounded sales program and adapting production, insofar as is consistent with the following paragraph, to produce the necessary quantity of these lines.
 - (b) By determining the lines of goods most desirable for a well-rounded production program and planning sales, insofar as is consistent with the preceding paragraph, so as to sell the amount of these lines necessary to secure economical production.
3. Proper control of expenditures.
 - (a) By requiring the preparation by each department head of an estimate of the expenditures of his department during the next budget period.
 - (b) By requiring the submission of these estimates to the Advisory Committee for consideration and approval.

BUDGETING: ITS USEFULNESS TO THE SMALL BUSINESS

- (c) By the prohibition of any expenditures in excess of the departmental estimates without the permission of the Advisory Committee.
 - (d) By requiring the submission of monthly reports showing a comparison between the actual expenditures for the month and the estimated.
4. Formulation of a financial program.
- (a) By the estimating of cash receipts based on the sales program and the estimate of collections.
 - (b) By the estimating of cash disbursements based on the production, purchasing, plant and equipment, and departmental expense budgets.
 - (c) By determining the excess of disbursements over receipts and the preparation of a financial program which will secure funds to provide for this excess.
5. Co-ordination of all the activities of the business.
- (a) By the preparation by each department of an estimate of its activities during the budget period.
 - (b) By the studying of these departmental estimates by the departmental executives and the Advisory Committee.
 - (c) By the modification of the activities of each department to the end that they co-ordinate with the activities of each other department.
 - (d) By the preparation of an estimated balance sheet and an estimated statement of profit and loss showing the anticipated results of the operations provided for by the budgetary program.
 - (e) By the formulation of plans and policies which will make possible the attainment of the estimated results as shown by the financial reports prepared in the preceding paragraph.

Conclusion

I trust you have been able to see the permanent advantages of operating a business on a budget system and its usefulness to the small business.

If you do not have a budget in your business I invite you to try your hand at one, and I promise you will find it fascinating work.

Increment Costing—Special Costs for Special Needs

By W. J. ELLIOTT
WINDSOR, ONT.

It is generally accepted that an inflationary spiralling economy is a challenge to industrial management to increase production, improve quality and reduce costs. The present cold war period in which we live calls for weapons to attack the forces that tend to disrupt our normal economy. Some examples of what I mean by disruptive forces are — the clamour for normal consumer goods while we are attempting to produce substantial amounts of war materials; higher taxes to meet defence spending; shortages of materials; higher wages trying to catch up with higher living costs.

What can management use as weapons to meet the challenge of inflation?

The first step I suggest, is to formulate and establish sound financial, merchandising and business policies. No successful business can be run haphazardly. Cost accountants must contribute by furnishing management with essential information to enable it to evaluate, plan and control the results of policy decisions. Nowadays, I believe that all members of management are more cost conscious than ever before, but I am not so sure that they have a clear understanding of the different types of costs and their application, or their usefulness.

Three Classes of Costs

I would segregate costs into the three major classes or types, which are generally recognized in business.

First, there is the historical or accounting cost, resulting in final profit determination. You are all familiar with this type of cost. It is the cost reflected in your monthly and yearly financial statements. They are generally developed for a past specific period of time. They are recognized as historical costs as a result of their origin.

The second type involves the control aspect of current operations. This control aspect can be best identified as serving management by measuring current operation in relation to some predetermined expected standard. For example, labor standards are determined for all direct productive labor efforts by time and motion studies. Because this standard acts as the yardstick,

INCREMENT COSTING — SPECIAL COSTS FOR SPECIAL NEEDS

the actual performance can be related to it for control purposes. It is like par on a golf course. It tells you whether you are a professional or an amateur. It enables you to determine any improvement and the degree of improvement. Budgets are another form of control. Many supplementary cost reports reflect variances which enable management to decide and proceed with corrective action.

The third type is the projected or forecasted type of cost used as a basis for formulating sales policies, projecting capital expenditures and other future goals. These costs are future costs. They serve as guide posts to the future. They are important. This type of cost information is of valuable assistance in policy decision for expansion of facilities or the development of new products.

Increment Costs

I would like also to promote, for your consideration, another concept of costing which is supplementary but which establishes control, and at the same time is a projected type of cost. This procedure is designated as the "increment cost" approach. The terminology defines this cost — an "added" or increased cost, but in application the decrement cost counterpart or decreasing cost factors are also evaluated.

These types of cost do not replace the normal costs currently used in the operation of any business. They are special costs produced for specific purposes under varied conditions. They are partial costs. They are developed as special cost projects. They are developed in such a manner that management is able to evaluate the economic effect of alternative courses of action. To quote a top automotive executive: "given the facts — the right decision is easy." They are concise and conclusive costs, because all the assigned or allocated costs are eliminated from the analysis.

The allocated or fixed cost factors act as a smoke screen to confuse and mislead management in alternate choice determination. It is not necessary to produce total costs for projects or proposals in order to provide the essential information for management's decision. The emphasis is placed on the *differences* in the cost for the cost factors that are different.

I can illustrate this statement by a very common example: the automobile, because it is a product with which you are all familiar and very close to my scope of operation. Let's say you drive 10,000 miles per year and being cost accountants, you

COST AND MANAGEMENT

naturally calculate the cost per mile. You figure depreciation, gasoline and oil cost, insurance, license, repairs and all other cost factors in arriving at this mileage cost. Assume for some reason, maybe because of taking up a new residence, you increase your mileage to 15,000 miles per year and you ask yourself: 'how much more will it cost me?' You would review the elements of cost and only consider the items of cost that would change in determining the extra cost for the additional 5,000 miles. That is why I repeat that the emphasis is placed on the *differences* in the cost factors that are different. This difference is your "out of pocket" expense. For the extra 5,000 miles, the increment cost method is adapting this simple illustration to corresponding cost requirements of your business.

Increment costs are comparative costs. By that I mean that they are based on or used in relation to other costs of established value. The main objective of the increment cost is to guide management in making policy decisions. Their specific use in our company for make or buy decisions, alternate methods of manufacture, project justification for capital and expense expenditures, and the economic profit of sales policies is ample evidence of the benefits derived from the logical approach of increment costs.

Operation and Method of Application

For purposes of illustration, I have prepared two exhibits. The figures shown are purely theoretical and are not to be construed as actual costs.

Exhibit 1 shows a cost development resulting from a requirement for a management decision on whether to continue the purchase of a part completely finished from an outside supplier, or to purchase unfinished from an outside supplier and finish in our plant. An analysis of the cost factors shown, reveals the following:—

Direct material under 'B' is less "A", because of its unfinished condition.

Direct labor is calculated at standard operating efficiency. The inefficiency, or the off-standard labor performance, is a controllable factor and therefore should not influence the final decision. This is more readily understood in situations where labor is reflected on both sides of a proposal because in either case it is a controllable factor. I emphasize this point, because to my mind, it is a further proof of the fallacy of using total cost

INCREMENT COSTING — SPECIAL COSTS FOR SPECIAL NEEDS

EXHIBIT 1

COMPARATIVE COST ANALYSIS SUMMARY

(a) CURRENT PRACTICE

PART NUMBER — 12345

PART NAME — Handle

Type of Material — Die Casting

SOURCE — A.B.C. Mfg. Company

(b) ALTERNATE PROPOSAL

PART NUMBER — 12345

Type of Material — Die Casting

PART NAME — Handle

Quantity Involved — 175,000

SOURCE — X.Y.Z. Casting

Rough — Finish in our plant

Company

INCREMENT COST

	PROPOSAL "A"	PROPOSAL "B"
Direct Material	\$.3255	\$.2000
Direct Labor at Standard .....		.0200
<i>Manufacturing Expense</i>		
Material Stock Handling and		
Inspection .....	.0075	.0075
Processing and Employees Supplies .....		.0200
Expense Tools .....		.0100
Maintenance Labor and Material .....	.0005	.0050
Fringe Benefits .....	.0015	.0075
Rejects, Scrap, etc. ....		.0040
Transportation .....	.0050	.0060
Manufacturing Cost .....	.3400	.2800
Special Tooling .....		.0050
Total per piece .....	.3400	.2850
Total per Quantity Involved	\$59,500.00	\$49,875.00
FIXED ASSET REQUIREMENT		5,000.00

which would obscure this controllable fact. The main feature of this increment cost study is the manufacturing expense or overhead analysis.

I repeat a statement I made earlier, that this analysis is specific to the problems awaiting decision. It is partial and not obscured by allocated expenses which are merely red herrings. This type of work calls for an on-the-spot study by cost analysts. It requires the co-operation of industrial engineers, plant engineers and all members of factory management. The cost analyst can achieve the desired results only by serious consideration of all the expense factors for the areas involved. He should also consider whether the action resulting from the ulti-

COST AND MANAGEMENT

mate decision, will increase or decrease this particular expense item and to what degree?

Many decisions must of course, be made from projected or forecasted information. In these instances it is often necessary to rely on the best available technical information and imaginative thinking, but even this approach does not detract from the value of the conclusions arrived at by increment cost analysis.

Application to Capital or Expense Expenditure

Exhibit 2 illustrates a practical application of the increment cost principle to a project justification. A project for a capital or expense expenditure is evaluated to furnish management with a forecast of expected results from the expenditure. I will not attempt to explain all the details of our project procedures because that subject would require a rather lengthy review. However, I *will* give a brief synopsis of its function.

It is our considered opinion that a systematic presentation of supporting facts and figures incorporating a specific analysis for each proposal, is essential for management to use as a basis for implementing a sound capital expenditure program. Careful scrutiny should be made of the company's ability to maintain a position or to improve earnings, and this should be the goal of your organization. A careful review of your facilities and equipment may result in decisions to sell some and replace others when such a move would give your company greater security and a higher return. Obsolescence of machinery and equipment is often a hidden industrial disease that can hardly be detected in the early stages, but which advances constantly, sometimes very rapidly. If your competitors find better methods and can produce more economically, then you may not be able to compete at a profit. Our project procedure, we believe, forestalls this possibility.

The expenditures for capital are controlled by certain dollar limits at different levels of management. For example, general superintendents or chief engineers can approve expenditures for minor amounts, while the treasurer's approval will be required above their limits. Likewise, the management committee approval is necessary on amounts in excess of the treasurer's authority. These limits are set to ensure a more rigid control of capital versus expense spending. Expense limits are generally double those for capital.

INCREMENT COSTING — SPECIAL COSTS FOR SPECIAL NEEDS

EXHIBIT II

PROJECT JUSTIFICATION SUMMARY

TITLE REPLACEMENT OF BULLARD BT 5211 WITH A MODEL AH LOW SWING AUTOMATIC LATHE			
REQUEST NO. FA-416-51	PROJECT NO.	LOCATION TRANSMISSION DEPT. 33 - PLANT 2	DATE AUTHORIZED
			DATE COMPLETED
AUTHORIZATIONS AND EXPENDITURES			
CAPITAL PORTION		EST. COST \$30,000.00	ACTUAL COST \$30,000.00
EXPENSE PORTION		-	-
TOTAL		\$30,000.00	\$30,000.00

SAVINGS ANALYSIS

	ESTIMATED ANNUAL SAVINGS	REALIZED ANNUAL SAVINGS AT SAME COST AND VOL. FACTORS	VARIANCE (UNDER) OVER REALIZED	REALIZED ANNUAL SAVINGS AT CURRENT COST AND VOL. FACTORS
DATE OF STUDY				
DIRECT LABOR	\$ 2,000.00	\$ 1,800.00	\$ (200.00)	
DIRECT MATERIAL				
INDIRECT LABOR AND SALARIES	-	-	-	
OPERATING SUPPLIES	3,000.00	2,900.00	(100.00)	
EXPENSE TOOLS	100.00	150.00	50.00	
PURCHASED UTILITIES	-	-	-	
MAINTENANCE, REPAIRS, ETC.	2,500.00	2,325.00	(175.00)	
EMPLOYEE INSURANCE, TAXES, ETC.	500.00	475.00	(25.00)	
LOSSES, DELAYS AND DEFECTS	-	-	-	
FIXED CHARGES	-	-	-	
MISCELLANEOUS	-	-	-	
ASSESSMENTS	-	-	-	
TOTAL EXPENSE	6,100.00	5,850.00	(250.00)	
GRAND TOTAL	8,100.00	7,650.00	(450.00)	

ESTIMATED RETURN ON INVESTED CAPITAL

CAPITAL OUTLAY	\$30,000.00	\$30,000.00	\$ -
LESS ESTIMATED RESALE VALUE OF OLD MACHINE	4,000.00	4,100.00	100.00
NET CAPITAL OUTLAY	26,000.00	25,900.00	(100.00)
ESTIMATED ANNUAL SAVINGS	8,100.00	7,650.00	(450.00)
AVERAGE ANNUAL DEPRECIATION ON PORTION TO BE CAPITALIZED 8.5% OF \$30,000.00	2,670.00	2,670.00	-
AVERAGE ABSORPTION IN LIEU OF DEPRECIATION ON PORTION TO BE EXPENSED	-	-	-
ESTIMATED ANNUAL SAVING AFTER DEPRECIATION AND ABSORPTION IN LIEU OF DEPRECIATION	5,430.00	4,980.00	(450.00)
INCOME TAX ON ESTIMATED SAVINGS AT 54.6%	2,964.78	2,719.08	(245.70)
ESTIMATED ANNUAL NET SAVING AFTER DEPRECIATION AND ABSORPTION IN LIEU OF DEPRECIATION AND INCOME TAX	2,465.22	2,260.92	(204.30)
PERCENTAGE PROJECT WILL RETURN PER ANNUM AFTER TAX ON MONEY INVESTED	9.48 %	8.73 %	\$

The general objective is to concentrate as far as possible on those projects which indicate the most substantial savings. These special saving analyses are made for each proposal involving replacement of existing facilities. Remember, the only way you can get your money back is through cost reduction, or product or method improvement. Therefore, management must study every proposal, it must have all the facts, and then the odds are in favor of the decision being a sound one.

COST AND MANAGEMENT

You will see that the approach to the forecasted savings by the acceptance of this proposal is similar to the example on the previous chart. Direct material, direct labor, and expense analysis is specific to this particular case study. The same direct analysis is made, recognizing the elimination of certain cost factors and the addition of others.

It is not always practical to use a fixed percentage of earnings as the justification for approval of projects owing to the presence of such intangible factors as quality, safety, operator fatigue, production loss, etc. These advantages are hard to express in dollars but they enter into the decision to be made. The approving authorities, therefore, determine, after review of all the facts, whether or not the advantages to be gained are commensurate with the outlay.

This system was designed to promote well considered spending and accurate cost accumulation, in connection with the acquisition and development of essential facilities. I bring to your attention the income application because savings creating additional profit require additional tax payments.

At this point, may I repeat a previous statement that the emphasis is placed on the *differences* in costs that are *different*. Projects, for which savings estimates have been prepared are reviewed approximately six months after installation has been completed, with a view to determining to what extent the estimates are being vindicated. The six months period is more or less flexible to allow the analyst group to schedule the review work, along with savings estimates on new project requests, without periodic undue work congestion.

The intensity of the audit research is in proportion to the degree to which the saving feature influenced management's acceptance of the project, with particular attention being paid to "border-line" cases. The realized savings are calculated with the same wage and volume factors as were employed in arriving at the original estimate in order to reflect a true comparison between the old and new facilities.

A supplementary calculation employing wage and volume factors effective at the time of the review is also developed to indicate intervening cost trends. Significant variances are checked to ascertain contributing causes — not with a primary view of censuring or criticizing, but with a view of pin-pointing

INCREMENT COSTING — SPECIAL COSTS FOR SPECIAL NEEDS

those areas where greater caution or improved technique seems necessary in future estimating.

General Application

The third application of the increment cost principle is more general in scope because in many instances its requirement is one of necessity rather than desire.

For example, existing costly surplus material losses may be greatly reduced by pricing at a lower level. This may not return the full cost but it can reduce the loss. To remain competitive on certain products it would be foolhardy to take the position that unless we get at least the full cost return we will not offer it for sale. Under such a policy the whole cost would be lost, instead of a part.

I mention for your consideration another example — such as an offer of additional business at a reduced selling price. Whether you accept this business or not, certain fixed charges will remain and certain other variable or semi-variable charges will be incurred. Should management close its ears to such an offer or should it be accepted? This increment cost process helps management to reach a decision by measuring the revenue returns against the cost outlay and showing the resulting profit.

The question: "what are the economics of the proposal?" is of major importance, and by developing the answer, you render an important contribution to your company's success.

Conclusion

I would like to conclude by saying that the concept of increment costing has, in our considered opinion, enabled us to make systematic presentation of reliable facts and figures for the guidance of management. The economic needs of the moment continue to stimulate our desire to conceive and develop other applications of increment cost to the complex problems of industry to-day.

Maybe we have not realized the full extent of the possibilities of special cost studies, but only by improving and developing new costing techniques, can our worth to management be increased.

Accountants Reports for Management

AVARD MARVEN, B.A., B.Com., C.A.

MONCTON, N.B.

During the war years, it was said of the accountants in public practice, that they were so preoccupied with auditing, tax practice and special war time problems of their clients, that they have not fully explored the possibility of rendering service to management. Although the degree of our preoccupation has not changed, managerial problems which have developed in the competitive evolution of business structure since that time, has focused much of the attention of all accountants to managerial service.

The basic problems of management may in part be summarized by a glance at the elements of business:—

(a) *A Business enterprise* is one which seeks to profit by exchanging goods and services for money.

(b) *To produce the flow of goods and services*, the economists tell us that management needs capital, land and labor. It needs funds with which to acquire lands, buildings and machinery, purchase raw materials, engage employees to manufacture these materials into goods and to sell them on the competitive market.

(c) *Management is beset by the economic mazes* of the laws of demand and supply, diminishing returns and the like. Its products must be converted into cash or its legally enforceable equivalent at a profit or management will not succeed.

Throughout the business operations, the accountant and his work are ever present. It is he, who records these varying day-by-day transactions in a systematic way. Finally, he and his staff prepare the managerial report or reports.

These reports can be a great aid to management. They can also be a great burden. Generally speaking, I am not in favor of making more reports or designing new and complicated ones, but rather, I support fewer and better reports, the kind which are most useful to management.

All reports in use should be examined periodically in the light of their current usefulness. Many reports have a habit of continuing long after they have served their period of usefulness. Accordingly, management either spends unnecessary time and

ACCOUNTANTS REPORTS FOR MANAGEMENT

energy trying to digest their contents or politely places them on file for no future reference.

There are some *reports which do not influence managerial opinion* or policy making. I have in mind the all-too-familiar T-4 wage summary and supplementary forms, reports to the Dominion Bureau of Statistics, Workmen's Compensation returns and many others. It sometimes appears that Governmental requests have gone a long way in removing monotony from the accountant.

However, *many reports are vital to management* and are designed to influence managerial decisions:—

1. Here are found the *comparative* Balance Sheets and Profit and Loss Statements, Cost analysis, which indicate the changes in financial position, comparison of actual results with the Budget.
2. *Special investigations* give rise to other reports which have a great effect on managerial opinion. Studies preliminary to business expansion, labor problems, bonus and profit sharing schemes. All of which have become important and are necessary in the formulation of managerial policy.

Occasionally management may act on intuition — but, more often decisions are made after careful study of factual reports.

Now let us consider some of the important factors which should be present in a qualified report:—

1. *Promptness is essential.* Reports should strive to present the current picture before it is veiled in the mist of the past. Important details must be shown but promptness should never be sacrificed in order to gain accuracy in unimportant details. In some cases, preliminary reports are issued to managements showing pertinent approximate results which are followed later by actual.
2. *The factual data* assembled should supply management with
 - (a) Historic results. Actual compared with the previous budget.
 - (b) Future results — a forecast of the anticipated results for the future.

COST AND MANAGEMENT

3. *Reports should be written in simple concise language.* (Ladies' Skirt). The conclusions and recommendations should be unbiased and be sufficiently strong that they will stimulate managerial action.

What reports are management interested in? —

Financial

Here is found the *capital problems of the business*, and includes the working capital requirements. These would all be presented in what may be called a "Cash Budget" which involves: (a) the extending of credit to customers; (b) the size and cost of inventories; (c) the amounts to be expended during the period for construction or purchase of fixed assets; (d) dividend policy and the amount of funds available from retained earnings. Those earnings which have escaped the clutches of the shareholders.

2. Production

In the field of production, numerous problems are continually being met. After the production quotas of the budget have been agreed with the sales and financial departments of the business, the accountant is faced with variations in the predetermined forecasts and must supply the management with the causes thereof:—

- (a) Plant efficiency.
- (b) Material variances as between prices and quantities.
- (c) Labor variances, costs and the productiveness.

In special studies, the desirability of increasing or making changes in the production equipment, together with the anticipated results. Reviews of the productive and economical lines manufactured with a view of concentrating on the most advantageous.

3. Distribution

Here, the accountant can furnish management worthwhile service. Sales forecasting, in which the results of sales and productions are co-ordinated, has provided for intelligent basis for the making of decisions. Sales analysis have enabled management to determine more accurately the effectiveness of sales efforts. Sales forces have been reorganized and incentive quotas established to increase salesmen efficiency.

Problems of determining what products to sell, the prices and the quantities, all enter this study.

ACCOUNTANTS REPORTS FOR MANAGEMENT

The accountant is charged with heavy responsibilities in keeping management advised and alerted. Of their failures in the past, one may look at a prominent failure which was, in part, the result of insufficient information.

The Failure of the City of Glasgow Bank in 1878. Although all the causes of this unfortunate situation cannot be attributed to a lack of accounting information as well, it should be noted that no audit of the bank transactions was made until the investigation took place.

The City of Glasgow Bank failed not because of any defalcation, but because loans were made on poor security and that further speculations made to recoup the losses, did nothing but increase the losses.

The Balance Sheet as at June 5th, 1878, which was submitted to the shareholders of the Bank, was falsified. Subsequent investigation revealed that the assets were overstated by 2 million pounds and the liabilities by a like amount.

Just how the accountant effected a balance or reconciled this statement with his books, I could not say, but the repercussions on the shareholders who were not protected by limited liability, was disastrous. Although the creditors were eventually paid in full, the losses totalling over 5 million pounds had to be met by shareholders, holding 847 thousand pounds of stock, with a result that many shareholders became bankrupt.

I had not originally intended to conclude this talk on such a sombre note, but it certainly illustrates the importance of adequate reports to management. Management which has learned to depend on reports, will not act on important decisions without the advice of the accountants.

COST AND MANAGEMENT

« STUDENT SECTION »

ADVANCED COST ACCOUNTING

Comments by A. V. HARRIS, C.A., R.I.A.

QUESTION 4 (9 Marks)

PAPER NO. 1

The Andrew Manufacturing Company, manufactures the products H and M.

The two types of products are joint products and another product; BP, is considered a by-product.

The net revenue from the by-product is deducted from manufacturing costs in determining the joint product costs.

Transactions for the month were as follows:

Material L purchased \$6,000; Material L unused, \$1,000.

Production: Product H — 80,000 lbs.

Production: Product M — 64,000 lbs.

By-Product BP accumulated, 8,000 lbs.

Revenue from BP — \$400.00.

Overhead and other expenses to point of split-off:

Power expense	\$ 900.00
Depreciation expense	400.00
Direct and indirect labour expense	2,000.00
Direct expense applied to BP	200.00
Direct expense applied to Product H	900.00
Direct expense applied to Product M	1,200.00

The common expenses to point of split-off are allocated to joint products on the basis of pounds.

Required:

Prepare a statement of manufacturing costs and their allocation to the joint products.

SOLUTION, QUESTION 4

The Andrew Manufacturing Company, Ltd.
Statement of Manufacturing Costs

	Total	Product H	Product M
Raw Material purchased	\$6,000.00		
Ending Inventory of Raw Material	1,000.00		
Raw Material entering production	\$5,000.00		
Overhead expenses to split-off:			
Power expenses	\$ 900.00		
Depreciation expenses	400.00		
Indirect Labour	2,000.00	3,300.00	
Common expense to split-off ..	\$8,300.00		

STUDENT SECTION

Less net revenue from By-Product

BP (Schedule 1)\$ 200.00

Net common expenses to be allocated\$8,100.00

Allocation of common expenses to

joint products\$8,100.00 \$4,500.00 \$3,600.00

Direct Manufacturing Expenses 900.00 1,200.00

Net Cost of Manufacturing Joint Products\$5,400.00 \$4,800.00

The Andrew Manufacturing Company, Ltd. (Schedule 1)

Statement of Revenue from By-Product

Gross Revenue from By-Product\$ 400.00

Manufacturing Expense directly applied 200.00

Net Revenue from By-Product\$ 200.00

COMMENTS

Allocation of costs of joint products in this problem was not difficult. Students, in some cases, did not handle the By-Product section of the question too well, but their understanding of the question was very good. Marks for this question were good.

FUNDAMENTALS OF COST ACCOUNTING

QUESTION 3 (23 Marks)

The Extra Manufacturing Company, manufactures one product. There are three Departments: Dept. No. 1; Dept. No. 2 and Dept. No. 3, and the processing requires the product to be handled through each succeeding department. Costs for the period:

	Direct Materials	Direct Labor	Mfg. Expenses	Total
Dept. No. 1	\$1,900.00	\$1,100.00	\$ 600.00	\$3,600.00
Dept. No. 2	300.00	600.00	300.00	1,200.00
Dept. No. 3	1,200.00	300.00	800.00	2,300.00
Units started	300			
Units completed ..	200			

There was no opening inventory of Work in Process.

Work in Process as of December 31, 1950 was—

Dept. No. 1 50 units, $\frac{1}{2}$ completed;

Dept. No. 2 Nil

Dept. No. 3 50 units, $\frac{3}{4}$ completed.

Required:

- 1—Cost statement for the month of December, with cumulative unit price per Department.
- 2—Statement of cost of Work-in-Process and of Finished Goods Inventories.
- 3—Journal entries for the month to record changes to and credits from Work-in-Process accounts.

COST AND MANAGEMENT

SOLUTION, QUESTION 3

Required (1) — Cost Statement:

	Dept. 1	Dept. 2	Dept. 3	Total
Direct Materials	\$1,900.00	\$ 300.00	\$1,200.00	
Direct Labour	1,100.00	600.00	300.00	
Manufacturing Expenses	600.00	300.00	800.00	
	<u>\$3,600.00</u>	<u>\$1,200.00</u>	<u>\$2,300.00</u>	<u>\$7,100.00</u>
Cost from Previous Dept.		\$3,272.73	\$4,472.73	
Total Cost to be accounted for	\$3,600.00	\$4,472.73	\$6,772.73	\$7,100.00
Cost accounted for as follows:				
Transferred to next dept. ..	\$3,272.73	\$4,472.73	\$5,515.03	\$5,515.03
Work-in-Process	327.27		1,257.70	1,584.97
	<u>\$3,600.00</u>	<u>\$4,472.73</u>	<u>\$6,772.73</u>	<u>\$7,100.00</u>
Units Started in Process				
to be accounted for	300	250	250	
Units accounted for as follows				
Transferred to next Dept. or to				
Finished Goods		250	250	200
In Process		50		50
		<u>300</u>	<u>250</u>	<u>250</u>
Total Units Accounted for		300	250	250
Units Completed		250	250	200
Units in Process in terms of				
Finished Units		25		37.5
Production in terms of Finished Units		275	250	237.5
Unit Cost in Dept.	\$13.0909	\$ 4.80	\$ 9.6843	
Cost from Previous Dept.			13.0909	17.8909
		<u>\$13.0909</u>	<u>\$17.8909</u>	<u>\$27.5752</u>
Accumulated Cost		\$13.0909	\$17.8909	\$27.5752

REQUIRED (2)

Statement of Cost of Work-in-Process and of Finished Goods Inventories

Work-in-Process

Department No. 1	\$ 327.27
Previous Dept.	\$ 894.55
Department No. 3	363.15
	<u>1,257.70</u>

\$1,584.97

Finished Goods \$5,515.03

Total Inventories \$7,100.00

REQUIRED (3) — JOURNAL ENTRIES

	Dr.	Cr.
(1) Work-in-Process Dept. 1	\$3,600.00	
Direct Labour Payroll		\$1,100.00

COST AND MANAGEMENT

Stores	1,900.00	
Manufacturing Expense	600.00	
Control and Accounts Payable		
(2) Work-in-Process, Dept. 2	\$1,200.00	
Stores		\$ 300.00
Direct Labour Payroll		600.00
Manufacturing Expense Control and Accounts Payable, etc.		300.00
(3) Work-in-Process, Dept. 3	\$2,300.00	
Stores		\$1,200.00
Direct Labour Payroll		300.00
Manufacturing Expense Control and Accounts Payable, etc.		800.00
	Dr.	Cr.
(4) Work-in-Process, Dept. 2	\$3,272.73	
Work-in-Process, Dept. 1		\$3,272.73
Charging Dept. 2 with goods transferred from Dept. 1		
(5) Work-in-Process, Dept. 3	\$4,472.73	
Work-in-Process, Dept. 2		\$4,472.73
Charging Dept. 3 with goods transferred from Dept. 2		
(6) Finished Goods Inventory	\$5,515.03	
Work-in-Process, Dept. 3		\$5,515.03
Transferring to Finished Goods Inventory		
Units completed during the period.		

COMMENTS

Solutions to this problem were either well prepared or very poorly prepared by candidates. The above solution is only one — and the equally acceptable solution could be submitted whereby material was added at the beginning of the process, so that the material was 100% complete in respect to work-in-process inventories.

As has been frequently observed, process cost problems must be carefully scrutinized if accurate results are required, and several students who thought that Department No. 1 costs were $\$3,600.00 \div 300$ units — were among those who did not appreciate the intricacies of the problem.

COST STUDIES PUBLISHED BY THE SOCIETY

Copies available at 50 cents each

A	
Accounting Controls for Management, Function of	May 1950
Accounting in the Public Interest	April 1944
Accounting Procedure Can. vs. Caused by Variations in Law	November 1948
Accounting, Recent Developments in	May 1948
Accounting Reports for Production Executives	July-August 1950
Accounting System for Retail Chain Meat Markets	March 1954
Aircraft Industry, Costs in the	April 1945
Aircraft Manufacturing Cost Control	February 1950
Aircraft Production, Cost Determination in	March 1944
Aviation in Canada, History and Development of	February 1942
B	
Break-even Point, Organizing for Improvement in	November 1949
Bread Bakery Costs	May 1940
Budgetary Control in Job Manufacturing as Applied to a Foundry, Machine and Engineering Plant	June 1950
C	
Cancellation Procedure in an Electrical Products Manufacturing Co.	September 1944
Catering Business, Costing for a	August 1943
Clear Thinking in Management	June-July 1942
Collective Agreements in Construction Industry in Montreal	February 1951
Company Organization and Reorganization, Some Aspects of	May 1951
Control of Operations Through Effective Organization	May 1941
Controlled Job Cost	March 1945
Corporation Accounting and the Canadian Income Tax Act	June 1951
Cost Control	April 1951
Cost Investigation Procedure, General Observations Concerning	June-July 1943
Cost of Management	April 1951
Cost Reduction Through Cost Control	July-August 1949
Cost System, Difficulties of	April 1931
Cost Controlling, The Art of	June-July 1943
Cost Accounting and Control in To-morrow's Competitive Economy	April 1945
D	
Dehydration Costs	December 1944
Depreciation, A Practical Time-saving Plan of Accounting for Fixed Assets and	December 1941
Depreciation of Fixed Assets, Accountant's Viewpoint of	May 1949
Depreciated Assets, Accounting for Fully	May 1944
Differential Cost Accounting	April 1944
Differential Costs	May 1949
Dominion Companies Act, Revision of	April 1948
E	
Effective Cost Control	February 1950
Employees' Representation in Swift Canadian Co. Ltd.	March 1936
Excess Profits Tax	August 1942
Exchange Fluctuations in Relation to Accounting	September 1933
Executive Training	December 1948
Export, Pricing for	April 1946
F	
Factory Costing, Part I	October 1942
Food Cost Control	September 1950
Foreman Training, Post-war Profits Through	June 1945
G	
Graphs in Controlling Production, The Use of	April 1941
H	
Humanizing Cost Data	November 1927
I	
Incentive for Worker, Salesman and Executive	June-July 1943
Industrial Accounting from a Practical Standpoint	November 1929
Industrial Engineering, Modern Internal Auditing and Its Relation to	April 1945
Industrial Unrest To-day	May 1950
Industrial Engineers Do Not Reach Top Management, Why	September 1950
Insurance	April 1933
Internal Auditing	February 1951
Inventory Control	May 1947
Inventories, The Cost Approach to	December 1941
L	
Labor's Aims and Responsibilities	January 1939
Labour Cost Control	February 1948
Labour, The Efficiency of	July 1929

